Trans-Lake Washington Project
Washington State Department of Transportation
Sound Transit

MEETING SUMMARY

TRANS-LAKE WASHINGTON PROJECT
TECHNICAL COMMITTEE
MUSEUM OF HISTORY AND INDUSTRY, SEATTLE
JANUARY 10, 2001 — 9:00 AM TO 12:00 PM

INTRODUCTION, WELCOME AND AGENDA REVIEW

Pat Serie, EnviroIssues, welcomed the committee after its return from the holidays and reviewed the agenda. The purpose of the meeting was to receive updates on the first round of community design workshops and potential mitigation opportunities, review information and provide input relating to the definition of alternatives, and review the preliminary results of the navigation study. Input to the Executive Committee regarding the tunnel feasibility study was also discussed. There were no changes to the agenda.

RESULTS OF COMMUNITY DESIGN WORKSHOPS AND POTENTIAL MITIGATION OPPORTUNITIES

Lee Pardini, Merritt and Pardini, and Amy Grotefendt, EnviroIssues, reviewed the input from the first round of community design workshops held in November, 2000. Amy explained that the purpose of the first round of workshops was to get a sense of values important to the community and measures of success for the project. She stressed that the community design workshops would be used to provide input and direction to the project from a community point of view, but that the community design workshops would not be decision-making forums. The corridor was divided into four areas:

- Portage Bay/Roanoke/Eastlake;
- Montlake/Laurelhurst;
- West of I-405 (Points Communities);
- East of I-405 to Redmond

Representation included residents, business people, and commuters along the corridor in each of those areas, and numbered 13-20 at each workshop. Each group of people will remain consistent through the remaining two sets of workshops. Eastlake representation was slightly lower than expected, and some people will be added to that group. Open houses were held in the evening in each area after the day-long workshop.

An iterative process will enable results and workshop input to be shared with the technical team for the design and engineering work with the environmental team, and for review by the committees.

Lee Pardini reviewed the major themes heard in each of the four areas, and characterized differing voices within each area. Lee stressed that mitigation is inseparable and indistinguishable from the definition of the alternatives. In general, the major themes emerging from this series of workshops were:

1. The project should not make things worse than the current situation. Noise is a big issue.
2. Minimize cut-through traffic congestion near freeway and on arterials.
3. Knit communities back together, mending both real and perceived wounds along the length of the corridor.

Lee stated that community participants talked a great deal about 'lids'. He emphasized, however, that there were no presumptions being made for the project regarding exactly what kind of courses may be appropriate, or their potential locations. Workshop participants also understood this.

A brief summary of the major issues that evolved from the workshops follows.

Portage Bay / Roanoake / Eastlake area issues

- Awareness of and sensitivity to noise. Mitigate noise on SR 520, as well as on I-5.
- Use streets to connect communities that were historically together.
- Eliminate cut-through traffic.
- Create community center and open space in front of Seward school, possibly on top of a lid.
- Receptive to HCT modes.
- Begin a pedestrian and recreational link from Eastlake through to the Arboretum.
- Sensitivity to the hillsides and effect on traffic.
- Concern with air and water pollution.
- Aware of the limitations of lids; sensitive to landscape not being flat; consider lids that fit in and around freeway features.
- Sensitive to the Portage Bay viaduct being a visual feature, but also a source of noise; Presented with idea of using cables on a bridge to attach transparent acoustic panels to control noise.

Montlake / Laurelhurst

- Recreational and pedestrian issues.
- Restore historic Olmstead park.
- Receptive to building on a lid at Montlake such as library. A community center is already available, and space at that center should not be affected.
- Don't compete with the existing commercial center.
- More interested in open space than a town center.

- Remove unused ramps in Arboretum.
- Sensitive to and concerned with notion of traffic flowing from Montlake corridor into 520.
- Receptive to HCT access at Montlake at freeway, keeping it at the lower level but providing easy access to street level.
- Support for tying into existing north-south and east-west pedestrian and bike corridors.

West of I-405 (East of lake)

- Interest in extensive lidding from Lake to Bellevue Way
- Strong opposition to creating community center on a lid.
- Aware of difficulty of soundwalls on slopes both visually and acoustically.
- Looking to soundwalls and lids to create pedestrian access; while not trying to cover scar.
- Use green space to knit community on both sides of the freeway.
- Large sensitivity to noise, especially at the lake-front.
- Interest in restoration of the creek areas.
- Support for HCT access along corridor, but only station access for these communities (no Park and Rides).
- Use construction on lids for public purposes, but not housing.

East of I-405

- Region has larger commercial and industrial uses.
- Potential for sound walls with lids.
- Preserve/enhance street connections across the freeways.
- Want more on/off ramps for access, but don't want more congestion at those points.
- North Bellevue
    - Interest in eliminating cut-through traffic;
    - Support for lids on the freeway between 148th Ave NE and West Lake Sammamish, including houses and other built uses over the top of the freeway
- Redmond
    - Don't detract from landscaping.
    - Increase pedestrian links; link with existing/planned trails.
    - Concern for noise and other community sensitivities.
    - Freeways intrude into the community via the on/off ramps. Use urban design features to make it understood that exit from a freeway results in entrance to a neighborhood.

The I-405 interchange, will require more detailed design and time for discussion.

General issues

- There were concerns about visual and construction impacts of lids.
- Enhancements to community areas might include bridges that are themed to become part of the community, as well as bricks and light fixtures.

Terry Marpert, City of Redmond, described Redmond's plans for pedestrian and bicycle trails connecting the Sammamish River Trail to the Redmond Town Center, and plans for pedestrian trails along Bear Creek, connections across SR 202 to Bear Creek Valley, and along the old Burlington Northern Santa Fe railroad corridor.

Jim Leonard, Federal Transit Administration, stated that the interstate completion funds used to build the I-90 lids on Mercer Island would not be available for this project. Lee Pardini stated that though there is a perception that lids are the only way to control noise, the participants also understood their limitations, including the need for ventilation structures for lengthy lids.

Lee Pardini offered clarification about what was meant by urban design features. In an abstract sense, urban design principles call for such elements as landmarks, corridors, and pedestrian pathways. These are manifested in urban design features such as parks, bike paths, trails, and open space. Urban design fixtures such as lamps, lights, and distinctive bridges, create a visual statement to demonstrate a unified community. Support for focus on such design in the communities necessitates having to talk about some of the visual results such as the fixtures.

Peter Dewey, University of Washington, stated that he understood there were some preliminary designs that would be reviewed with the groups, and is concerned with the assumptions and the impacts that these would have on the performance of the arterial system.

The next workshops will be held the last week of February, 2001, followed by a third round in April. The second round of design workshops will review sketches of preliminary design work, and visual impacts. Each round of workshops will be followed by open houses on the east and west sides of the lake.

Pat Serie asked committee members to let the project team know of feedback they are hearing in the communities. The summary report of the first round of workshops is available on the website at http://www.wsdot.wa.gov/translake/docs.htm

STATUS OF ALTERNATIVES DEVELOPMENT

Jeff Peacock, Parametrix, introduced a status presentation about the alternatives being developed by the technical team, and the associated starting points and general assumptions for HCT alternatives, roadway alternatives, and for TDM/Land Use strategies. He emphasized that he was presenting a starting point for modeling and design work, and that there would be several iterations. There may be changes to the starting point assumptions.

Commenting on the discussion of lids in the previous presentation, Jeff stated that techniques are being developed by the team to work with noise and community connectivity. Some of the ideas converge with lids, but other ways will also be investigated. Jeff reiterated that that modal alternatives are still being developed from the results of the first level screening, and stated that the modal alternatives will eventually be melded into multi-modal alternatives.

TDM / LAND USE STRATEGIES

John Perlic, Parametrix, presented the TDM and Land Use strategies currently under development for the project. Updates will be given as the strategies are more fully developed. John reminded the committee that the Trans-Lake Study Committee recommended that substantial TDM resources relative to the capital cost be evaluated for the project. The strategy will focus not only on trip reduction measures, but on land use policies as well.

The project is beginning meetings with local jurisdictions in the corridor to determine the feasibility of an interlocal corridor agreement to:

- Commit to trip reduction goals, milestones, and monitoring;
- Seek funding to help achieve those goals;
- Include the private sector.

Potential TDM strategies include:

- Commute trip reduction;
- Vanpools;
- Alternative transportation – newer strategies are being investigated both nationally and locally;
- Land use strategies;
- Cost and pricing – can make the other categories take a leap in effectiveness.

A complete TDM strategy will also need to make real transportation options available through corresponding complementary infrastructure investments for bicycle and pedestrian access, HOV direct access, transit centers, and local and regional transit service.

Land use actions could follow two levels of discussion:

1. Continue to look at land use as part of larger program of supporting incentives, infrastructure enhancements, and programs to reduce SOV trips.
2. Explore effect of larger changes to land use through sensitivity tests, for which information gathered for the Metropolitan Transportation Plan may be relevant.

The third major item would be Transportation System Management (TSM) to improve operating effectiveness. The focus for this component will likely be on incident management techniques.

Questions were raised about what specific examples of land-use strategies might be. There was also a question as to whether an interlocal agreement might be blocked by a single jurisdiction. John stated that the jurisdictions would not be forced to sign such an agreement. Rather, an agreement would be delineated as a way of articulating common goals, while addressing the concerns of each community. King Cushman, PSRC, suggested not wrapping pricing strategies into the cost. It was also suggested that the committee receive periodic information about the pricing assumptions and incentives.

HCT ALTERNATIVES DEVELOPMENT

Jeff Peacock introduced Bruce Emory of Puget Sound Transit Consultants and Mark Scheibe of Parsons Brinckerhoff, who are heavily involved in working on the HCT options. Jeff then presented the assumptions to be used for modeling HCT on each of the 520, I-90, and the mid-lake corridors, describing lane configurations, potential alignments, and possible service routes (handout available). The Sound Transit Alternative Transit Technology Assessment (ATTA) is identifying technology candidates for Trans-Lake HCT.

The committee raised the issue of transit center plans for downtown Kirkland, and asked for coordination with this project. Three downtown stops are planned with Sound Transit Express and Metro. The I-405 study is looking at connections to downtown in a couple of different ways. Jeff Peacock stated that the Trans-Lake Project would be following those developments, and making sure that chosen alignments are considered as the Trans-Lake Project considers more specific routings in the next two months.

Len Newstrum, Town of Yarrow Point, stated that major north-south connections to and from central business districts may not actually capture the market for public transportation. The question was raised as to whether peak-hour traffic, which accounts for a major portion of congestion, is really between central business districts. Jeff Peacock stated that the ridership projections will illustrate the origins and destinations of riders.

HIGHWAY ALTERNATIVES DEVELOPMENT

Jeff Peacock then reviewed the highway alternatives being assumed for modeling along each section of the arterial photograph of the corridor.

Minimum Footprint

The minimum footprint alternative would be designed so that there was no option of adding a third lane.

HOV lanes

From Redmond to I-405, the HOV lanes would be moved to the inside of the facility. Jeff stated that the termination of the HOV lanes at West Lake Sammamish parkway would remain the same. Terry Marpert, City of Redmond, strongly suggested that the HOV lanes be extended to 202, and after some discussion, it was agreed that the technical team would use that as a baseline assumption. The question was raised about whether 2+ or 3+ assumptions would change the results of modeling the effectiveness of the freeway. Jeff stated that it was assumed that the facility would need to operate as at least a 3+ facility, if not more. Direct HOV connections in all directions are assumed at I-405, and other places later determined to be beneficial. HOV travel into the University District would be improved. HOV termination at I-5 may be dependent on the direction of the express lanes. There is also a possibility of ending the HOV at I-5 with a merger into GP lanes feeding into I-5.

GP lanes plus HOV lanes

Eastbound GP lanes could include start from direct connections from the Fairview/Eastlake area, or begin in the Montlake area. Westbound GP lanes might combine with the Roanoke on-ramp to I-5. A wide variety of interchanges are being considered along the corridor, each with different impacts and operating characteristics. The footprint would also be wider, especially on the lake. The current assumption is that it would probably necessitate two structures on the lake, but that does not affect current performance modeling.

GP and HOV lanes at the I-405 interchange would require major reconstruction of that interchange. GP lanes would be assumed to extend to SR 202.

Jeff reminded the committee that the analysis for the next several months would be using a 20-year horizon, and that the EIS itself will require a 30-year horizon. The emphasis would be to decide which combinations of modal activities will function the best together.

Bus-way

Adding a bus-only facility would look and operate much the same as the HOV facility. The same assumptions will be applied to this option as for HOV. Bus-ways as discussed include one of two options: Bus rapid transit, which uses a dedicated facility; or a paint-stripe-separated facility. This could either be in place of or in addition to an HOV lane.

Bike and pedestrian access

Bike and pedestrian access and connectivity are assumed throughout the length of the corridor, sometimes within and sometimes outside of the right of way (ROW). Terry Marpert suggested that bike and pedestrian access also be assumed to extend to 202, to tie into existing and planned trails throughout Redmond. Susan Sanchez, City of Seattle, suggested that the west terminus extend beyond Foster Island to existing connections at Montlake at least. Foster Island, because of water and the nature of its trails, would not be a suitable area for bikes.

NAVIGATION STUDY

Jeff Peacock presented the results of the navigation study for Lake Washington. The results will be used to determine the expected parameters and needs surrounding the height of a potential new bridge on the Lake.

Navigational records show that a draw span has only been regularly used by a single recreational vessel. 'Rogue' vessels have required the use of the draw span on occasion, and commercial/industrial users are limited. Cranes that have traditionally used it can be dismounted. Renton land use policies may show a need for a greater number of industrial barges on the lake.

Design options include removing the center draw span, which would improve the operational reliability, but require increased navigational clearance at the high rise. There may not be a need for two high rise structures, and the east side may be more suitable since the grade level leading to the bridge is already fairly high. There may be mitigation related to how high the high rise becomes.

Necessary clearance would be 70 feet vertical, 200 feet horizontal, with a draft of 30 feet, to accommodate typical open water use. The current high rise has a vertical clearance of 64 ft. The I-90 bridge has a maximum vertical clearance of 70 feet.

If the ship canal or Montlake cut is to be crossed with a new structure, it is assumed that it would have 70 feet vertical, 146 feet horizontal, and 30 feet draft clearance. Final approval for navigational changes as a result of a new structure rests with the U.S. Coast Guard. The navigational study is scheduled to be published shortly.

Anne Robinson, U.S. Army Corps of Engineers, asked that the potential for industrial development not be further limited by new structures, and that the clearance envelope on new structures over the ship canal or Montlake Cut mirror those of the Aurora Bridge, with a vertical clearance of 127 feet. Austin Pratt, U.S. Coast Guard, stated that the height of the Aurora Bridge was not determined for navigational purposes, and that the limiting clearance to Renton, the only area of the lake zoned for industrial commercial use, is already limited by the I-90 bridge. He also stated that it may be helpful to show that the trend at the south end of the lake is moving away from commercial/industrial zoning.

TUNNELS REVISITED

Doug Schulze, City of Medina, stated that he didn't feel that the group had come to consensus on a recommendation to the Executive Committee about the prospect of considering tunnels further as a result of the tunnel feasibility study. Mitch Wasserman stated that his principle reservations were that:

1. The justification for eliminating tunnels is based on very preliminary cost estimates and project team discomfort about the understanding of how to build it. Elimination based on cost alone seems unreasonable.

2. A better understanding of how the floating submerged tunnel might help reduce the cost of mitigation on both sides needs to be understood before removing the option from consideration.

Mitch stated that the single alternative that specifically related to tunneling was removed, and the committee was assured tunneling would be reviewed as a construction technology for all options. It doesn't seem like a good faith effort to accomplish that.

Jeff Peacock stated that a floating submerged tube would need to enter the water at about 30 feet in depth at the shoreline, which would most likely mean the construction would be cut and cover before the road daylights at the surface. The comparison needs to be made between the issues, risks and costs of a floating tunnel versus a floating bridge.

Jeff also stated that the viability of tunneling is not mutually exclusive to a single alternative. Tunneling has been studied for its feasibility of use in crossing the water only, and does not preclude the possibility of tunneling for other sections of the roadway. King Cushman pointed out that the downtown Seattle bus tunnel would have required much larger ventilation stacks,

had diesel buses been allowed in that tunnel. He suggested that the possibility of electric buses be considered for under the lake.

Doug Schulze suggested that air treatment facilities in Europe are fairly large, but are not as big as the ventilation structures shown in the tunnel presentation.

Jeff Peacock stated that a tunnel represents a build option, and not a modal issue. The tunnel feasibility study was done to determine the feasibility of tunneling under the lake as a build option. The Executive Committee will be presented with the comments of the Technical Committee. Generally, there is agreement that the bored tunnel and sunken submerged tunnel would be difficult to complete technically. Most committee members also agreed that the floating submerged tunnels should also not be considered further for roadways. The reservations characterized by Mitch Wasserman would also be expressed. It was agreed that the recommendation should be that the team not put more resources into studying the tunnels, but the Executive Committee may consider reserving a decision on the floating submerged tunnel until such a time that the rest of the information about alignments, design, et cetera, is available to make a more informed decision.

UPCOMING MEETING SCHEDULE, ACTION ITEMS

Pat Serie reviewed the upcoming meeting schedule. Modeling results will begin to be available in February, and will be presented to the committees as they are completed. A recommendation by the Executive Committee on the multi-modal alternatives to study further is expected by April 25, 2001. The meeting was adjourned for an informal lunch with members of both the Executive and Advisory Committees.

HANDOUTS

- Agenda
- Overview of November 2000 Community Design Workshops (presentation)
- Alternatives Definition – Defining a Transportation Demand Management and Land Use Strategy (presentation)
- High Capacity Transit Alternatives (presentation)
- Lake Washington Navigational Study (presentation)
- Tech Memo – Update on Alternative Transit Technology Assessment Report, from Barbara Gilliland, January 8, 2001
- Meeting Schedule

ACTION ITEMS

- Distribute times and locations of February Community Design Workshops to all committees.
- Distribute summary of land-use opportunities prepared by I-405 study.
- Distribute navigation study.
- Coordinate with DT Kirkland transit study

MEETING ATTENDEES

Committee Members

Present	Name		Organization
X	Arndt	Jim	City of Kirkland
X	Billen	Don	Sound Transit
	Bowman	Jennifer	Federal Transit Administration
	Brooks	Allyson	Washington State Office of Archaeology and Historic Preservation
	Conrad	Richard	City of Mercer Island
X	Cushman	King	Puget Sound Regional Council
X	Dewey	Peter	University of Washington
	Fisher	Larry	Washington State Department of Fish and Wildlife
	Francis	Roy	King County Department of Transportation
	Gibbons	Tom	National Marine Fisheries Service
X			(Dave Hirsch)
	Kennedy	Jack	U.S. Army Corps of Engineers
X			(Anne Robinson)
	Kenny	Ann	Washington Department of Ecology
	Kircher	Dave	Puget Sound Clean Air Agency
X	Leonard	Jim	Federal Highway Administration
X	Marpert	Terry	City of Redmond
X	Newstrum	Len	Town of Yarrow Point
X	Rave	Krista	U.S. Environmental Protection Agency
X	Pratt	Austin	U.S. Coast Guard, 13th District
X	Sanchez	Susan	City of Seattle
X	Schulze	Doug	City of Medina
	Sparrman	Goran	City of Bellevue
X			(Bernard van de Kamp)
X	Sullivan	Maureen	WSDOT – NW Region
X	Teachout	Emily	U.S. Fish and Wildlife Service
X	Wasserman	Mitch	City of Clyde Hill
	Willis	Joe	Town of Hunts Point

Other attendees:

John Maloof, Laurelhurst
Jonathan Dubman, Montlake Community Club
Steve Gorcester, King County Council
Philip Grega, Seattle
Elizabeth Newstrum, Town of Yarrow Point
Jean Amick, Laurelhurst

Project Team

Rob Fellows, WSDOT
Les Rubstello, WSDOT

Lorie Parker, CH2M Hill
Pat Serie, EnviroIssues
Jeff Peacock, Parametrix
John Perlic, Parametrix
Lee Pardini, Merritt and Pardini
Cathy Strombom, Parsons Brinckerhoff
Kimberly Farley, WSDOT
Paul Hezel, EnviroIssues
Amy Grotefendt, EnviroIssues

PJH